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**(54) Title:** SYSTEM FOR BREATH SIGNATURE CHARACTERIZATION

**(57) Abstract**

Apparatus (20) and method for generating a breath signature signal (32) for a person who delivers a breath sample to a breath sampler (22). A transducer (28) is communicated with the breath sampler (22), for sensing at least the temperature, the pressure and humidity of the breath sample. In response, the transducer (28) generates a breath signature signal (32) which distinguishes one person from another. The breath sample can be tested (a) for validity, (b) for distinguishing it on the basis of sex and age, (c) for selecting whether or not the same person delivered two different breath samples, and (d) for recognizing the identity of a particular person giving two different breath samples. Additional

features include breath references (36, 36A-D, 38, 38A-D, 62), comparators (34, 34A-D), a distinguisher (34B), a selector, (34C), and a recognition means (34D).

